REMARKS

At the outset, Examiner Landsman is thanked for the personal interview conducted on February 25, 2004 with the undersigned and Dr. Mark Zoller, a lead scientist at Senomyx, Inc. During the interview, the present claims were provided in the form of a discussion draft. It was noted that Applicants have attempted to adopt all of the Examiner's suggestions with respect to claim phraseology and § 112 issues. Particularly, it was noted that Applicants had limited the claims to assays that utilize a hetero-oligomeric receptor comprised of two G protein polypeptides respectively referred to as T1R2 and T1R3, and that these claims further require that the T1R2 and T1R3 are encoded by nucleic acid sequences that hybridize under defined stringent hybridization conditions to specific nucleic acid sequences (SEQ ID NO:3 or SEQ ID NO:5) (*See*, claims 149 and 150) or provide that the T1R2 and T1R3 polypeptides possess at least 90% sequence identity to the T1R2 and T1R3 polypeptides encoded by SEQ ID NO:3 and SEQ ID NO:5. Also, it was noted that the previous objections to claim phraseology have been overcome as the new claims do not contain the phrases asserted to be unclear.

Also, Applicant's representative, Dr. Zoller, provided an overview of the sweet taste receptor technology that is the focus of this application. Particularly, Dr. Zoller emphasized the fact that the subject T1R2/T1R3 sweet receptor responds to all sweet ligands (natural and artificial) tested in binding and activating assays according to the invention to date and therefore provides an

exquisite target for identification of novel sweeteners and sweet enhancers. The Examiner seemed favorably disposed to the proposed amendments and the discussion by Dr. Zoller and indicated that when the amendments were formally submitted that he would provide suggestions regarding phraseology, if required, to overcome any remaining objections or rejections not overcome by the present amendments. However, it is anticipated that the present amendments should place this case in condition for allowance.

Turning now to the Office Action, Applicants note with appreciation that the prior objections to the oath, title and specification have been withdrawn.

The prior claims were objected to based on certain phraseology and claim dependency issues. These issues are not specifically addressed as the prior phases and dependency objections are not applicable to the claims submitted herewith.

Claims 100-115 and 118-148 were rejected under the judicially created doctrine of obviousness type double patenting. This rejection is overcome by the Terminal Disclaimer submitted with this Reply. Withdrawal of this rejection is respectfully requested.

Claims 132 and 133 were rejected as being broader than the enabling disclosure. This rejection is moot as the current claims do not include assays using <u>any</u> ligand in the kinase/arrestin pathway.

Claims 147 and 148 were rejected under USC § 112 first paragraph as being broader than the enabling disclosure. Essentially, the Office Action

indicates that these claims embraced any receptor that responded to sweet stimuli and were not limited to hetrodimeric receptor comprising T1R2 and T1R3 polypeptides. Also, the Office Action indicated that the claims are not restricted to T1R2 and T1R3 polypeptide sequences that are encoded by DNA sequences that hybridize to SEQ ID NO:3 and 5 respectively under defined stringent hybridization conditions.

It is anticipated that this rejection has been overcome by the present amendments. During the interview, Applicants advised that the claims were to be amended to recite specific defined stringent hybridization conditions or to provide that the T1R2 and T1R3 polypeptides possess at least 90% sequence identity to the polypeptides encoded by SEQ ID NO:3 and SEQ ID NO:5 and combine to produce a hetero-oligomeric taste receptor that responds to sweet taste stimuli (natural and synthetic sweeteners). It is anticipated, based on the interview, that the present claims are free of the prior § 112 scope of enablement objection.

Claims 147 and 148 were previously also objected based on the written description grounds. Likewise, it is believed based on the recent interview that the object claims have obviated the prior written description rejection.

As noted above, the claims are limited to assays that utilize either (i) a hetero-oligomeric sweet receptor comprised of T1R2 and T1R3 polypeptides having at least 90% sequence identity to the polypeptides encoded by SEQ ID NO:3 and 5 respectively; or (ii) a hetero-oligomeric sweet receptor comprised of

T1R2 and T1R3 polypeptides that are encoded by DNA sequences that hybridize under specific, defined stringent hybridization conditions to SEQ ID NO:3 and SEQ ID NO:5 respectively. The specification clearly discloses and provides data in support thereof that Applicants, on filing, were in possession of assays for identifying sweet ligands and sweet enhancers based on the information and experimental data contained in the as-filed application.

It is Applicants' understanding, based on the interview, that the new claims should not be subject to a written descriptive rejection.

Finally, the prior objection to claims 147 and 148, based on the recitation, "moderately stringent conditions" is moot. As noted, the claims have been rewritten in accord with the Examiner's suggestions to recite specific stringent hybridization conditions.

Based on the foregoing, this application is believed to be in condition for allowance. A Notice to that effect is respectfully solicited.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and

please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #10033754071US).

Respectfully submitted,

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